REMARKS

Reconsideration of the application in view of the following remarks is respectfully requested.

Rejection of the Claims Under 35 U.S.C. § 101

In the Office Action dated January 12, 2005, claims 16 - 34 were rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. In rejecting the claims for being directed to non-statutory subject matter, the Examiner asserts that the claims are not limited to practical applications in the technological arts. Specifically, the Examiner concluded that the claim language, "terminological information", connotes an abstract idea.

1. The Claimed Invention Recites Statutory Subject Matter To Automatically Integrate Terminological Information Into A Knowledge Base.

In rejecting Applicant's claims for being directed to non-statutory subject matter, the Examiner relies on *In re Warmerdam* and *AT&T Corp. v. Excel Communications, Inc.* In discussing the *In re Warnerdam* opinion, the Federal Circuit, in *AT&T Corp. v. Excel Communications, Inc.*, opinion, concluded:

> Whether one agrees with the courts conclusion on the facts, the holding of the case is a straightforward application of the basic principle that mere laws of nature, natural phenomena, and abstract ideas are not within the categories of inventions and discoveries that may be patented under 101. *AT&T Corp. v. Excel Communications, Inc.* 50 USPQ2d 1147 (Fed. Cir. 1999).

The claims of the subject application are not laws of nature, natural phenomena, or an abstract idea. Instead, the claims recite a practical computer implemented process with a useful, concrete and tangible result.

Applicant recites, in claim 16, "A computer implemented method for automating integration of terminological information into a knowledge base." The method includes "receiving, into a computer, input terminology information comprising a plurality of input terms and information that specifies ontological relationships among at least two of said input terms." The claimed method further includes the steps of "parsing said input terminology information to generate a logical structure that depicts ontological relationships among said input terms in a format compatible with said knowledge base"; "determining whether at least one input term exists as a node in said knowledge base"; "generating a new and independent ontology for said knowledge base comprising said logical structure of said ontological relationships if none of said input terms exist as nodes in said knowledge base"; and "extending said knowledge base by storing data that logically couples said logical structure of said ontological relationships to a node that matches an input term." Thus, the steps of "parsing", "determining", "generating" and "extending" clearly recite process limitations. The fact that the process operates on a knowledge base, stored as a data structure on a computer, does not negate that the fact the claim recites processes to receive input data (input terms and relationship information for the terms), and process the input data to add to a knowledge base.

According, taken as a whole, the claims of the present invention are statutory.

2. The Claimed Invention Defines "Terminological Information" As Comprising A Plurality Of Input Terms And Information That

Specifies Ontological Relationships Among At Least Two Input Terms.

In response to Applicant's argument in the 10/14/2004 Response to Office Action, the Examiner asserts that the claim term, "terminological information", is a term of variable and vague meaning, and rejects Applicant's examples set forth in the Specification. (1/12/05 Final Office Action, page 10). In rejecting Applicant's arguments, the Examiner noted that the "claims are to be judged by their limitations." (1/12/05 Final Office Action, page 11).

The claims in the Present Application set forth a definition for the claim term, "terminology information." Independent claims 16, 17 and 26 recite:

> *input terminology information comprising a plurality of input terms and information that specifies ontological relationships among at least two of said input terms.*

The terms used in a claim are given their ordinary meaning unless it appears from the patent that the inventor used them differently. *ZMI Corp. v. Cardiac Resuscitator Corp.*, 1844 F.2d 1576, 1578 (Fed. Cir. 1988). It is clear from the claim recitation that "terminology information" connotes terms or words and information that specifies relationships between the terms or words (*e.g.*, ontological information). As such, claims 16, 17 and 26 ascribe a clear and definite meaning to the "terminology information" claim term.

When interpreting claims, resort should be made to the claims at issue, the specification, and the prosecution history of the patent. *Id.* The Specification provides clear support for a claim interpretation that input terminology connotes terms or words

and information that specifies relationships between the terms or words. Table 3 shows example input terminological information formatted in the ISO-2788 format. (*Specification*, page 20, lines 21 – 22). For the example of Table 3, the input terms are "Congress Party of India", "BJP" and "Bharatiya Janata Party." The information, which specifies relationships between terms, includes: a Broader Term ("BT") relationship between "Congress Party of India" and "politics"; a synonym (SYN") relationship between "BJP" and "Bharatiya Janata Party"; a Broader Term ("BT") relationship between "Bharatiya Janata Party" and "politics", and a related term ("RT") relationship between "Bharatiya Janata Party" and "Hinduism." Applicant is not arguing that the example is part of the claimed invention. Instead, the example provides a context for interpreting the claim limitation. As such, Applicant respectfully contends that the claim limitation, input terminology, has a definite meaning in light of the claims recitation and specification.

3. The Claimed Invention Provides A Useful, Concrete and Tangible Result By Automating The Generation Of A Knowledge Base.

The Final Office Action noted the Federal Circuit's standard that defines statutory subject matter for a "new and useful process" as one that produces a "useful, concrete, and tangible result." *State Street & Trust Co., v. Signature Financial Group, Inc.* 47 USPQ2d 1596, 1600-1601 (Fed. Cir. 1998). The claimed invention provides a useful, concrete and tangible result. It is useful to augment a knowledge base with new input terms. The Specification describes one useful purpose that produces a tangible result from the claimed invention:

> The integration of user specified terminological information into a built-in knowledge base has application for use in specific domains. For example, an English language newspaper in India may buy a natural language processing system (*e.g.*, Oracle ConText) to provide search capability for their on-line edition. However, the newspaper may find that the built-in knowledge base has little or no knowledge of Indian politics and economics. For this hypothetical, the user desires to expand the built-in knowledge base to include terminological information on politics and economics. (Specification, page 20, lines 7 – 14).

The Federal Circuit in the *AT&T Corp. v. Excel Communications, Inc.* decision also noted that the claims in both that case and the *State Street* case were statutory because the claims recited useful, concrete and tangible results. That holding applies to the claims of the present application. Specifically, the claimed invention provides useful, concrete and tangible results by augmenting a knowledge base with terms and information input to the process.

Rejection of the Claims Under 35 U.S.C. § 112, First Paragraph

Claims 16-34 were rejected under 35 USC § 112, First Paragraph, due to the rejection under 35 USC § 101. Applicant has provided sufficient disclosure to one of ordinary skill in the art to practice the invention without undue experimentation. The disclosure includes detailed flow charts, textual description, and examples of the claimed invention. As such, the specification and drawings provide an enabling disclosure for the claimed invention.

Rejection For Double Patenting

Claim 16 was rejected for statutory type double patenting in view of claim 1 of US Patent 6,654,731. In response to Applicant's argument in the 10/14/2004 Response

that claim 16 of the present application and claim 1 of US Patent 6,654,731 are not coextensive in scope, the Examiner argued that "linguistic relationships" and "semantic relationships" are both subsets of "ontological relationships." (1/12/2005, Final Office Action, page 13). The Examiner then concluded that "the new term completely recaptures the previously patent material."

In essence, the Examiner is arguing that claim 16 of the present application is broader than claim 1 of US Patent 6,654,731 because the claim 16 term "ontological relationships" reads on US Patent 6,654,731 claim 1 terms "linguistic relationships" and "semantic relationships." Applicant respectfully contends that the issue for statutory type double patenting is not whether the claim at issue reads on the disclosure of a prior issued claim, but whether the claim recites the same limitations. The fact that "linguistic relationships" and "semantic relationships" are both subsets of "ontological relationships" is irrelevant. Clearly, claim 16 of the present application and claim 1 of US Patent 6,654,731 do not have the same limitations, and therefore the rejection for statutory type double patenting should be removed.

CONCLUSION

In view of the foregoing, it is submitted that the claims are in condition for allowance. Reconsideration of the rejections and objections is requested. Allowance is earnestly solicited at the earliest possible date.

Respectfully submitted,

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